Appl. No. 09/943,982
Amdt. sent July 17, 2006
Reply to Office Action of February 9, 2006

PATENT

REMARKS/ARGUMENTS

Claims 1, 2, 6-8, and 16-25 are pending.

Claims 3-5, and 9-15 are canceled.

Claims 1, 2, 6-8 and 16-25 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,304,980 by Beardsley et al.

The claims have been amended to more clearly distinguish over the cited art. No new matter has been added.

The present invention relates to backup processing, which is understood by those of ordinary skill include copying data stored in a first storage system as backup data to be stored in another storage system. The backup data in the other storage system can then be subsequently restored in the case of data loss in the first storage system.

An aspect of the present invention includes performing such a backup operation between a storage system and a first backup storage system. If an error condition is detected which prevents the procedure from completing, then the backup operation is completed by backing up remaining data in the storage system to a second backup storage system. For example, independent claim 1 recites in part:

> executing backup processing by using the first path and a backup instruction command set having a plurality of backup commands, each backup command backing up a different portion of the data from the disk storage system to the first storage unit as backup data, every portion of the data having a corresponding backup command, the backup processing including executing one or more of the backup commands;
> detecting if a problem occurs in the first path based on a result of execution of one of the backup commands in the backup instruction command set;
> changing from the first path to the second path if a problem is detected; and
> continuing execution of the backup processing by using the second path and executing backup commands in the backup instruction command sets that have not yet been executed

See also independent claims 17 and 22. These recited limitations (and similarly recited limitations in claims 17 and 22) are not taught by Beardsley.

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Thus, for example, claim 1 substantively recites in part "executing backup processing by using ... [backup commands for] backing up a different portion of the data from the disk storage system to the first storage unit as backup data" and "detecting if a problem occurs" and "changing from the first path to the second path" in response. Beardsley shows a primary DASD 104 (Fig. 1) backs up data to a secondary DASD 107, and vice-versa where the secondary DASD backs up data to the primary DASD. Beardsley is silent as to the detection of a problem between the primary DASD and the secondary DASD. Beardsley is silent as to switching to another DASD to complete a backup process that initially began with a first DASD. For example, if a problem occurs when the primary DASD is backing up data to the secondary DASD, Beardsley does not teach that the primary DASD continues to be backed up to a third DASD. Beardsley does not show a disk storage system where its data is backed up to a first storage unit and if a problem is detected, then its data is backed up to a second storage unit.
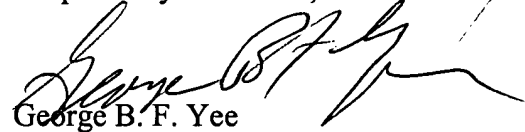
The Section 102 rejection of the claims is believed to be overcome.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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